

Watauga County Natural Areas Inventory

BEECH CREEK BOG NATURAL AREA

Site Significance: National
Quadrangle: Valle Crucis

Size: 185 acres
Ownership: Private

SIGNIFICANT FEATURES: The primary significance of the site lies in its fairly large, excellent quality Southern Appalachian Bog community and two rare species. The state's largest known population of the bog clubmoss (*Lycopodiella inundata*), a State Candidate plant species, is present. The clubmoss is known from only one other location in North Carolina. Repeated breeding season sightings of the Significantly Rare alder flycatcher (*Empidonax alnorum*) have been documented from the bog. A good example of a Northern Hardwood Forest is included in the site, as well as areas that buffer the hydrological conditions of the bog. Three Watch List plant species, narrowleaf willowherb (*Epilobium leptophyllum*), crested woodfern (*Dryopteris cristata*), and rose mandarin (*Streptopus roseus* var. *roseus*), are present in the site.

LANDSCAPE RELATIONSHIPS: The site lies at elevations ranging between 4600 and 5160 feet on the east flank of Beech Mountain. It is isolated in the landscape from other significant sites. Areas on Beech Mountain, within 0.5 mile to the west, are developed. Areas to the south and east are mostly pastures, with small fragments of forest. A fairly narrow corridor exists to the north along Beech Creek. The present lack of development in the small watershed surrounding the bog provides opportunities for protection of bog hydrology which may not be an option at a later date.

SITE DESCRIPTION: Beech Creek Bog is an excellent example of the very rare Southern Appalachian Bog community, located in the flat headwater region of Beech Creek. A fairly small watershed, about half of which is forested, surrounds the bog. The bog supports the largest population of the rare bog clubmoss (*Lycopodiella inundata*) in North Carolina. Immediately west of the bog are the east-facing slopes of Beech Mountain, with a good example of Northern Hardwood Forest which also serves as buffer to the hydrology of the bog. At 4600 feet in elevation, the bog is higher than most known in the state.

The well-developed bog contains a mosaic of vegetation zones, including herb and shrub dominated areas. Seeps occur at the upper end of the bog. Open parts of the bog contain deep mats of sphagnum moss (*Sphagnum* sp.) and herbs such as bulrushes (*Scirpus* spp.), lamp rush (*Juncus effusus*), and the uncommon crested woodfern (*Dryopteris cristata*) and narrowleaf willowherb (*Epilobium leptophyllum*). Some areas contain hummocks of sphagnum, with seepage goldenrod (*Solidago patula*), the sedges *Carex scoparia* and *Carex muricata*, and maleberry (*Lyonia ligustrina*), a common wetland shrub. Gardens of sphagnum moss with haircap moss (*Polytrichum commune*) are also present. Silky willow (*Salix sericea*) forms dense thickets in some parts of the bog. The rare alder flycatcher (*Empidonax alnorum*) has been documented on several occasions from these thickets from the 1970's to the present. Unusual in some parts of the bog are seeps flowing onto gravelly substrates with little vegetative cover. These seeps support the rare bog clubmoss (*Lycopodiella inundata*), with roundleaf sundew